

INTERNATIONAL SEARCH REPORT

Inter al Application No
PCT/EP2004/011599

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE, EMBASE, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	EP 1 365 034 A (BAYER HEALTHCARE AG) 26 November 2003 (2003-11-26) the whole document	1-6,8
X	DRESSMAN MARLENE A ET AL: "Gene expression profiling detects gene amplification and differentiates tumor types in breast cancer." CANCER RESEARCH, vol. 63, no. 9, 1 May 2003 (2003-05-01), pages 2194-2199, XP002317973 ISSN: 0008-5472 table 4 abstract	1-6,8

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

17 March 2005

Date of mailing of the international search report

17. 05. 2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HYMAN ELIZABETH ET AL: "Impact of DNA amplification on gene expression patterns in breast cancer" CANCER RESEARCH, vol. 62, no. 21, 1 November 2002 (2002-11-01), pages 6240-6245, XP002317974 ISSN: 0008-5472 the whole document	1-6,8
A	STEIN D ET AL: "THE SH2 DOMAIN PROTEIN GRB-7 IS CO-AMPLIFIED, OVEREXPRESSED AND IN A TIGHT COMPLEX WITH HER2 IN BREAST CANCER" EMBO JOURNAL, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 13, no. 6, 15 March 1994 (1994-03-15), pages 1331-1340, XP001095119 ISSN: 0261-4189 the whole document	
A	VIJVER VAN DE M ET AL: "AMPLIFICATION OF THE NEW (C-ERBB-2) ONCOGENE IN HUMAN MAMMARY TUMORS IS RELATIVELY FREQUENT AND IS OFTEN ACCOMPANIED BY AMPLIFICATION OF THE LINKED C-ERBA ONCOGENE" MOLECULAR AND CELLULAR BIOLOGY, WASHINGTON, DC, US, vol. 7, no. 5, May 1987 (1987-05), pages 2019-2023, XP009022435 ISSN: 0270-7306 the whole document	
A	KEITH W N ET AL: "CO-AMPLIFICATION OF ERBB2, TOPOISOMERASE II ALPHA AND RETINOIC ACID RECEPTOR ALPHA GENES IN BREAST CANCER AND ALLELIC LOSS AT TOPOISOMERASE I ON CHROMOSOME 20" EUROPEAN JOURNAL OF CANCER, PERGAMON PRESS, OXFORD, GB, vol. 29A, no. 10, 1993, pages 1469-1475, XP009022483 ISSN: 0959-8049 the whole document	1-6,8
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>KAURANIEMI P ET AL: "New amplified and highly expressed genes discovered in the ERBB2 amplicon in breast cancer by cDNA microarrays"</p> <p>CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 61, no. 22, 15 November 2001 (2001-11-15), pages 8235-8240, XP002264781</p> <p>ISSN: 0008-5472</p> <p>the whole document</p> <p>-----</p>	1-6,8

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 9
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a):

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-6, 8(all completely)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 9

Claim 9 is related to a diagnostic kit which is defined only in that it allows the conduction of the method of claims 1-8. Said feature is not a limiting technical feature. In absence of any other technical feature relating to the composition of the kit, said claim 9 is unclear (Art. 6 PCT) and therefore no meaningful search is render possible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-6 ,8 (all completely)

A method for the prediction of response to cancer treatment, by the detection of at least 2 markers located on one chromosomal region, wherein the markers are selected from the sequences listed as SEQ ID N° 2, 4, 5, 11, 15, 16, 18 and 19.

Inventions 2-71: claim 7 (partially)

A method for the prediction, diagnosis or prognosis of malignant neoplasia by the detection of at least one marker, wherein the marker has one of the sequence listed as SEQ ID N° 319-389.

INTERNATIONAL SEARCH REPORT

information on patent family members

Inter

ial Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1365034	A	26-11-2003	EP 1365034 A2	26-11-2003
			CA 2428112 A1	21-11-2003
			JP 2004159640 A	10-06-2004
			US 2004018525 A1	29-01-2004